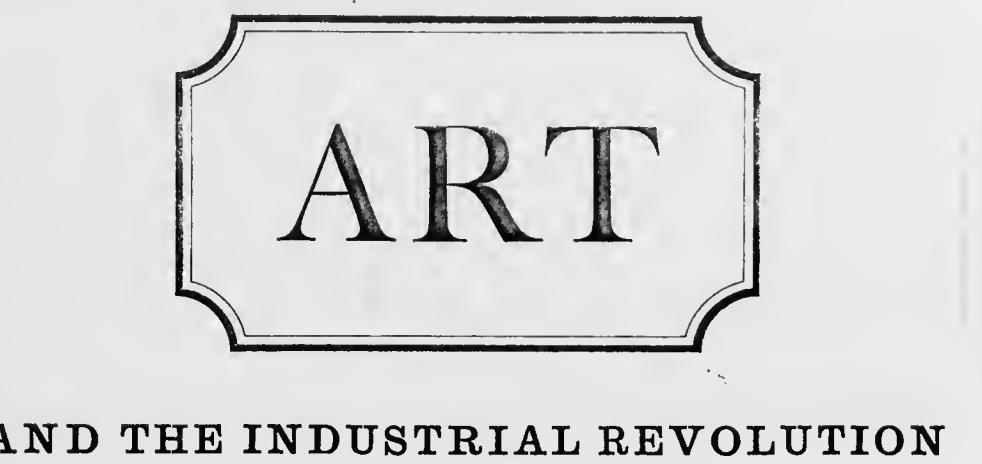
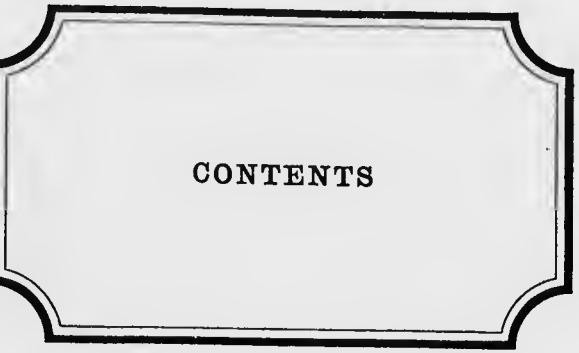


The attached sheets from Francis D. Klingender ART AND THE INDUSTRIAL REVOLUTION (1968) are meant to speak to two specific chords within your psyche : your (and indeed 'my' also) lust for recording the data of local history (p. 25), and, your need to know where to find the 'history' of the railroad in England (pp. 106 - 107).



EDITED AND REVISED BY ARTHUR ELTON



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EVELYN, ADAMS & MACKAY

I will use the railroad information on the next page in the calendar that I produce for 1986 -- RJT has already given me some data for the calendar. JDB was supposed to also. Here is my way that a <sup>1985</sup> calendar can be properly produced and effectively marketed in the remaining few weeks of the year.

## NEW LIFE IN THE PROVINCES

The poet's interest in trade and engineering was only one of many symptoms of a shift that was taking place in the intellectual life of Britain. The most progressive currents of thought were no longer emerging in the metropolis, but in countless provincial areas, where mining, industry and farming were being remodelled on scientific lines. Even the Royal Society, once the organizing centre of applied research, lost some of the initiative in this field during the eighteenth century. A symptom of the intellectual awakening of the provinces is the topographical literature of the period. First becoming important in the seventeenth century, it grew ever more voluminous as the eighteenth century advanced, and culminated in the decades around 1800. It expressed a new attitude to nature and to history. With ever-increasing zeal, scientific men and local worthies drawn from all classes explored the mineral wealth, the soils, the plants and animal life of each locality. They described the dress and customs of the people, their methods of husbandry and their trade. Local dialects and folk-songs were recorded. And, with intense pride in the latest achievements of art and industry, there emerged a no less fervent enthusiasm for local history and archaeology.<sup>19</sup> Nor was this new attitude purely intellectual; it gradually produced a new romantic response to the beauties and charms of nature.

How infinitely this change in outlook was linked up with the practical changes that were taking place at the time in agriculture and industry, and how rapidly it occurred, is illustrated by a passage from the preface to John Dalton's *Descriptive Poem*:

When we behold rich improvements of a wild and uncultivated soil, in their state of maturity, without having observed their rise and progress, we are struck with wonder and astonishment, to see the face of Nature totally changed. It carries an air of enchantment and romance; and ridiculous and unnatural scenes, given us by the poet, yellow harrys using the scythe and scythe-harrys, in the midst of our improved and embellished scenes, in the midst of our improved and embellished scenes, to represent the greatness and splendour of such a change. But how great and rational however the pleasure of such a sight may be, it is still surpassed, by that arising from the extraordinary increase of a trading Town, and new plantations of Houses and Men. Such was the satisfaction the author felt at the appearance of the town and harbour of Whitehaven, after an absence of somewhat less than thirty years. The Mines near that place are remarkable for so many singular circumstances, that they are generally esteemed to be well worth the observation of travellers.<sup>20</sup>

A similar contrast emerges if Defoe's *England of 1725* is compared with that

and age. Its birth was marked by the patent which a great engineering genius, Richard Trevithick (1771-1853), took out in 1802 for the 'Construction of Steam-engines; application thereof for driving carriages, and for other purposes'. Trevithick's engine was to transform the whole world. It used high-pressure steam; it was light and portable; it did away with the beam and harnessed the piston directly to its crank by a connecting rod; it could drive light machinery; above all, it could be mounted, with its boiler, on wheels and made to propel itself.<sup>21</sup>

On Monday, 15 February, 1804, Trevithick put in motion the first railway locomotive in history on a plateway running from the Parysden Ironworks near Merthyr Tydfil to the Glamorgan Canal, some ten miles down the valley. Anthony Hill, proprietor of the Plymouth Foundry, bet Samuel Homfray, the Parysden ironmaster, five hundred guineas that the locomotive could not haul ten tons of iron the whole way. The train set out on February 21. The locomotive ground its way along the line at five miles an hour, hauling not only ten tons of iron but scores of people hanging on to the tracks as well. Hill lost his bet. The locomotive was a great mechanical success, but it was too heavy for the plateway and broke the cast-iron plates. It was soon withdrawn and used to work a hammer, though the railway itself remained in use for many years. It was superseded by the Taff Vale Railway, which followed the same route and was opened in 1841 (Fig. 47).

In 1805 a second locomotive was built to Trevithick's design at Gateshead, and it has been suggested that this may have stimulated George Stephenson (1781-1848) to start making his first locomotive for the Killingworth colliery which started work in 1814. In July 1808, Trevithick exhibited yet another locomotive, 'Catch me which can', on a circular course near Eason Square and whirred it to run twenty-four hours against any horse in the Kingdom. The result is not known, but the engine ran for a few weeks till it broke a rail and overturned. This was his last attempt at steam locomotion.<sup>22</sup> His ideas, like those of Savery before him, were in advance of the technical resources of his time, and he did not have the patience to carry his great invention to the point of profitable exploitation. Other men reaped the benefits that were properly his.

Within a month of the Eason demonstration Trevithick started work on what was an almost impossible task, given the resources of his time—boring a tunnel under the Thames. Nevertheless, it succeeded in deriving over 1,000 feet of heading out of a total of 1,200 before the work was stopped by a inundation. The directors of the enterprise refused to support Trevithick's plans to dam the water back and make the heading dry, and it was abandoned. Seventeen years later, in 1824, Mark